

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

# **Process Sheet**

<b>Customer</b> : CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> : LONG STEP ASSEMBLY HIGH SKID LH
<b>Job Number</b> : 34283	
<b>Estimate Number</b> : 10270	
<b>P.O. Number</b> : <i>N/A</i>	<b>Part Number</b> : D350591311
<b>This Issue</b> : 28/08/2007 <b>S.O. No.</b> : <i>N/A</i>	<b>Drawing Number</b> : D3272 REV B
<b>Prsht Rev.</b> : NC	<b>Project Number</b> : N/A
<b>First Issue</b> : <i>N/A</i> <b>Type</b> : LARGE FAB ASSY	<b>Drawing Revision</b> : B
<b>Previous Run</b> : 33956	<b>Material</b> : <i>N/A</i>
<b>Written By</b> : <i>[Signature]</i>	<b>Due Date</b> : 06/09/2007 <b>Qty:</b> 5 <b>Um:</b> Each
<b>Checked &amp; Approved By</b> : <i>[Signature]</i>	
<b>Comment</b> : Est Rev:A 04.03.22 New issue KJ/RF Est Rev:B 07-06-09 Added D3272-1 JLM	

## **Additional Product**

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL  
Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

*W 28/8/07*

2.0	D32721	STEP
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)  
STEP  
BATCH: *B34005*

*W.M 07.08.28*

*(5)*

3.0	D30671	End Plate
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)  
Pick:  
Qty Part Number Description Batch  
1 D3067-1 End Plate *332836*

*W 01.08.29 5*

4.0	D32191	Support
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**Comment:** Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)  
Pick: --  
Qty Part Number Description Batch  
2 D3219-1 Support *333860*

*W 01.08.29 5*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 34283

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M103794  
M104721

3-Grind End Plate flush

A.M. 07.08.29

P.L. 07.08.29 5

P.L. 07.08.29 5

5

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

A.M. 07/08/29 (5)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

E.M. 07/08/29 (4544)

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

A.M. 07.08.29

5

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

P.L. 07.08.30

5

10.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty Part Number Description Batch  
1 D3065-041 Step Leg Assy B32032

A.M. 07.08.30

5

11.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch  
2 D3066-1 Spacer B33857

A.M. 07.08.30

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 34283

Part Number: D350591311

Job Number:



Seq. #:	Machine Or Operation:	Description :
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12.0	MS20600AD4W4	Rivets
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Comment: Qty.: 16.0000 Each(s)/Unit Total: 80.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
16	MS20600AD4W4	Rivet	M103947

a.m 07.08.30

5

13.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

Leave one rivet out until welding is complete.

a.m 07.08.30

5

14.0	QC5	INSPECT WORK TO CURRENT STEP
------	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

KE 07.09.04 5

15.0	D30671	End Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3067-1	End Plate	332836

KE 07.09.04 5

16.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M103794

4-Grind End Plate flush

a.m 07.09.04

5-Install last rivet as per Dwg.

a.m 07.09.04

KE 07.09.04 5

KE 07.09.04 5

KE 07.09.04 5

5

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 34283

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION



*M 07/09/05 (5)*

18.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP



*En 02/09/05 (452H)*

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1



touch up alodine

*M-L 07/09/05 (5x)*

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING



Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*M105068 (5x)*

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1



Wing Walk as per Dwg D3272 and QSI 005 4.4

*M105386 (5x)*

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk



*02/9/07 (5)*

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1



Pick Packing Kit

24.0

D22303

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 20.0000 Each(s)



Pick: Packing Kit

Qty Part Number Description Batch

4 D22303 Mounting Lug

*D30993-*

*07/09/06 (5)*

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 34283

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

D2618

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2618

Bushing

B33991-

26.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total: 3.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2856-400-720 Abrasion Strip

B32992-

27.0

D32351

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1

Mounting Lug

B33249-

28.0

D3278041

Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041

Support Assembly

B34006-

29.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A

Bolt

M104021-

30.0

AN413A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total: 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A

Bolt

M104746-



Date: Tuesday, 28/08/2007 10:22:23 AM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 34283

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

AN536A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A

Bolt

M105057

32.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M104885

33.0

AN960JD416

Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total: 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416

Washer

M104215 (3+) M104746 (7x)

34.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516

Washer

M104156

35.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3

Nut (or -3)

M104936

CP 7/6/06

**DART****RELEASED**

07.06.04

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**













- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

W/O 34283

DESIGN CP	DRAWN BY B	<b>DART AEROSPACE</b> HAWKESBURY, ONTARIO, CAN
CHECKED LE	APPROVED H	DRAWING NO. D3272
DATE 07.05.18	TITLE STEP ASSEMBLY, HI LONG	
A	04.03.01	NEW ISSUE
B	07.05.18	D3272-1 WAS D2622-120

Date: Tuesday, 28/08/2007 10:22:23 AM  
User: Linda Lacelle

**Process Sheet**

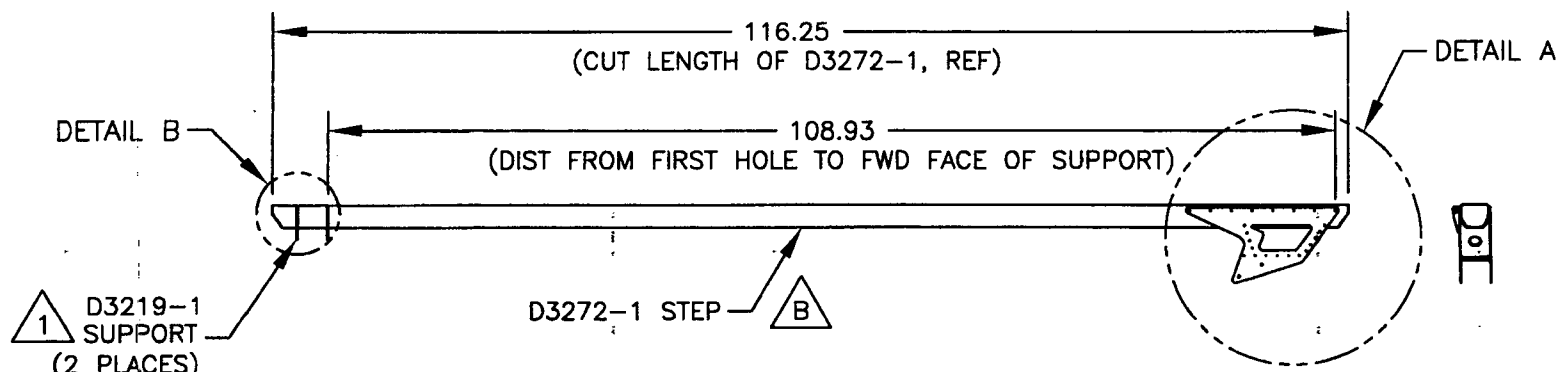
Customer: CU-DAR001 Dart Helicopters Services		Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH	
Job Number: 34283		Part Number: D350591311	
Job Number:			
Seq. #:	Machine Or Operation:	Description :	
36.0	MS21042L4	Nut	
			
Comment: Qty.: 8.0000 Each(s)/Unit Total : 40.0000 Each(s) Pick: Packing Kit Qty Part Number Description Batch 8 MS21042L4 Nut (or -4) 1104248			
37.0	MS21042L5	Nut	
			
Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s) Pick: Packing Kit Qty Part Number Description Batch 2 MS21042L5 Nut (or -5) 1104547			
38.0	QC4	INSPECT 100% KITS FOR COMPLETENESS	
			
Comment: INSPECT 100% KITS FOR COMPLETENESS			
39.0	PACKAGING 1	PACKAGING RESOURCE #1	
			
Comment: PACKAGING RESOURCE #1 Identify and pack for shipping as per PPP D350-591-311 Location: B			
40.0	QC21	FINAL INSPECTION/W/O RELEASE	
			
Comment: FINAL INSPECTION/W/O RELEASE			
Job Completion			

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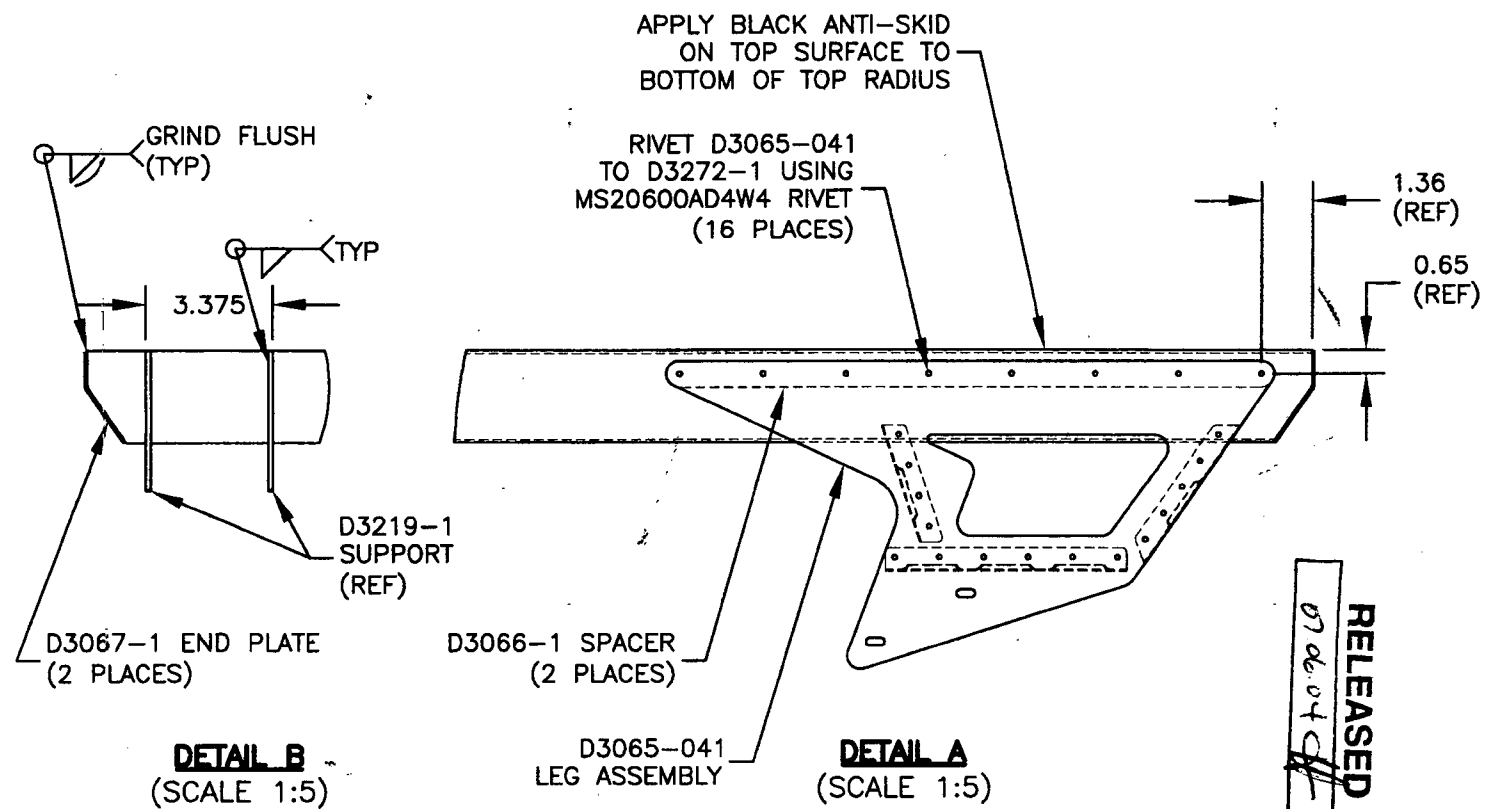
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**DART**

DESIGN	90	DRAWN BY	90	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	CE	APPROVED	CE	REV. B
DATE	07.05.18	DRAWING NO.	D3272	SHEET 2 OF 3
		TITLE	STEP ASSEMBLY, HI LONG	SCALE
				1:20



**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
**D3272-042 STEP ASSEMBLY (RH, OPPOSITE)**



**DETAIL B**  
(SCALE 1:5)

**DETAIL A**  
(SCALE 1:5)

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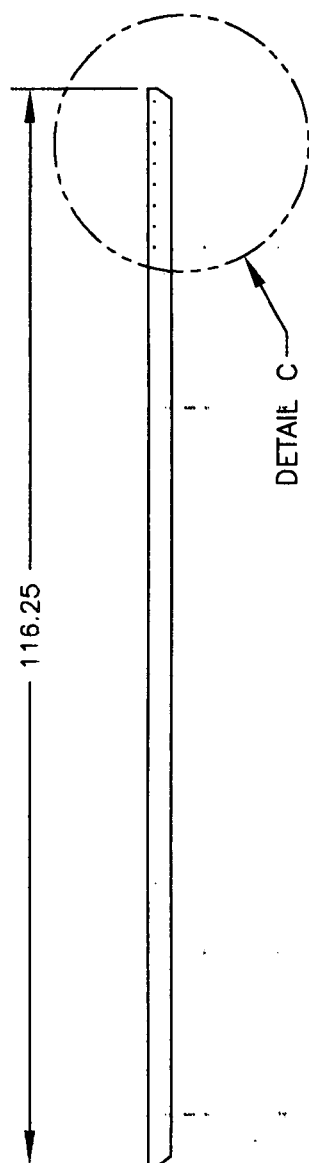
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**DART**

DESIGN <i>qp</i>	DRAWN BY <i>B</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18	TITLE STEP ASSEMBLY, HI LONG		SCALE 1:20

**RELEASED**

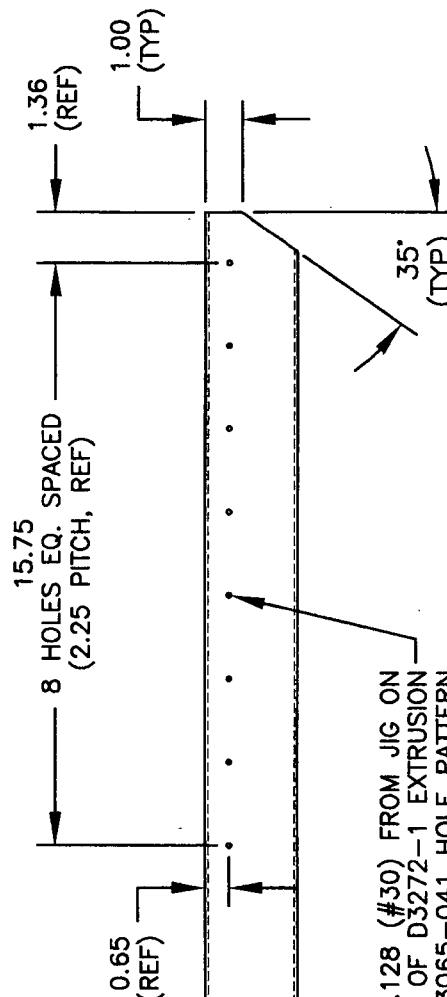
07.06.04 *[Signature]*



DETAIL C

**B D3272-1 STEP**

(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL  $\phi 0.128$  (#30) FROM JIG ON  
BOTH SIDES OF D3272-1 EXTRUSION  
TO MATCH D3065-041 HOLE PATTERN

**DETAIL C**  
(SCALE 1:5)

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Date: Thursday, 9/6/2007 2:33:59 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LONG STEP ASSEMBLY HIGH SKID LH
Job Number : 34283	
Estimate Number : 10270	
P.O. Number :	Part Number : D350591311
This Issue : 9/6/2007 S.O. No. :	Drawing Number : D3272 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : 8/28/2007 Type : LARGE FAB ASSY	Drawing Revision : B
Previous Run : 33956	Material :
Written By :	Due Date : 9/6/2007 Qty: 5 Um: Each
Checked & Approved By :	
Comment : Est Rev:A 04.03.22 New issue KJ/RF	
Est Rev:B 07-06-09 Added D3272-1 JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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REFERENCE ONLY

Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

07.09.05

2.0	D32721	STEP
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

STEP

BATCH: \_\_\_\_\_

3.0	D30671	End Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3067-1 End Plate \_\_\_\_\_

4.0	D32191	Support
-----	--------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3219-1 Support \_\_\_\_\_